PHILADELPHIA MEDICAL TIMES.

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ORIGINAL LECTURES.

CLINICAL LECTURES

ON PROLAPSE OF THE WOMB.

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LECTURE II.

(Continued from page 147.)

THE conjunction of the theory of *traction* with that of *ductility*—traction from the prolapsing vagina and bladder; ductility from a chronic congestion of the womb—thus offers a very reasonable explanation of the phenomenon of uterine elongation. It also accounts for the eversion of the lips of the os externum and for the circular hypertrophy of the glandular portion of the cervix. By the attenuation of the mechanically elongated part, and by the constant dragging of the vagina and bladder upon their belt of attachment, the veins of this presumedly non-involuted or otherwise softened structure—and more especially the veins below the os internum—are unduly constringed, and their circulation is, therefore, rendered sluggish. Through the stasis thus induced, the whole cervix, but principally its glandular portion, gains an excess of nutrition. The papillæ and capillary loops of the arbor vitæ become turgid; the sub-mucous layer of the cervical canal grows exuberantly from within outwards, and by rolling out makes the flaccid lips of the os gape open. By the tertiary accidents of friction against the sacrum, of exposure to atmospheric action, and of irritation from the dribbling urine, the mucous coat of the cervix becomes thickened and changed in structure. Thus is brought about that circular hypertrophy which intensifies all the other symptoms.

It is a vicious circle throughout: the prolapsing organ—say the vagina—tugs at the bladder, which yields, and in turn lends its weight towards the further descent of the former; by alternately coercing and being coerced, their united action at last begets the circular hypertrophy of the cervix; the latter returns the favor by edging and nudging on the vagina, which responds by still more increasing the prolapse of the bladder and the hypertrophy of the cervix, and by aiding them in drawing out the supra-glandular portion of the cervix. Thus this reciprocation is kept up until the constantly elongating and growing cervix has attained length and weight enough to act aggressively. Aided now by the downward succussions communicated to it by the movements of the body, it completes the work by wholly inverting the vagina. The resistance of the vaginal tube to this final extrusion, being spent upon its cervical attachment, pulls the already gaping lips of the os still more apart, makes the cervical canal funnel-shaped, and sometimes everts it so completely as to convert the internal os into an external one.

From this point of view, the condition of the cervix in any given case of prolapse determines the nature of the disturbing cause. If the uterine cavity is barely or not at all lengthened out, as in the simple descent of the womb, we may infer that the prolapse of the womb has been the initial event. If, however, marked elongation of the cervix is present, then the vagina and bladder have been the primarily prolapsed organs. Thus defined, the latter affection is essentially a prolapse of the vagina and bladder, and not of the womb; whereas the former is as essentially a prolapse of the womb. I beg you, however, not to regard this interpretation as final or authoritative. Pressed to the quick it may show flaws, and I therefore invite you to accept it simply as one more flexible than any other yet advanced. The truth is perhaps not yet reached, for nature transgresses by anonymous agents, whose ways are often past finding out.

We must now put our theories to test, in order to see whether they can be clinically sustained. Like our former patient, this one has also reached that period of life when senile atrophy of the reproductive organs begins to take place. The vagina, having lost its pelvic packing of fat, tends to sag down. This tendency is urged on by her occupation as a laundress, which compels the erect posture and much lifting of heavy weights. In one of her numerous confinements the perineum has sustained injury. The rent has not only deprived the vagina of its chief abutment, but has also straightened out and shortened its natural curve, making its axis coincide very nearly with that of the superior strait. The anterior wall of the vagina, being now unsupported, began to bulge downward. During gestation the vagina, like the womb, becomes hypertrophied, and after labor undergoes the same process of involution. Perhaps after the birth of her last child this process was arrested, and the vagina remained thickened and with impaired tenacity. Such a condition would of itself tend to promote a descent of the vagina; for, indeed, in the last months of gestation a prolapse of its anterior wall is by no means an uncommon event. Again, the vascular growths at the meatus urethræ gave so much anguish that she schooled herself into the habit of holding her water as long as possible, and consequently—for the latter act implies the performance of the former—of putting off the evacuation of her bowels. Of course, then, the over-distended bladder and the overloaded rectum, by pouching in the vagina posteriorly and anteriorly, would materially aid in dragging down this already prolapsing canal.

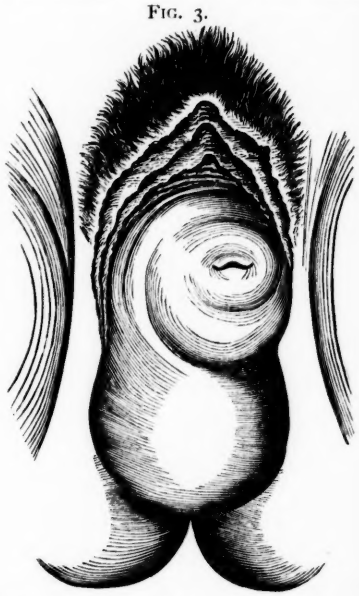
From the first, her bladder has kept pace with the vagina in its descent, until its base is now far below the level of its neck, and the pouch thus formed cannot be wholly emptied. In many cases, from the decomposition of the retained urine, cystitis is excited; even calculi are sometimes formed. Occasionally the neck of the pouch gets tightly jammed under the pubic arch; then the orifices of the ureters may become so obstructed as to bring about a dilata-

tion of the ureters or a hydronephrosis. Fortunately, not one of these accidents has happened to this woman; but, of course, the gravity of the urine contained in this pouch has helped to pull down more of the bladder, and still more of the vagina as well; for these arch-conspirators abet one another. The changes previously detailed have all along been taking place in the intermediate part of her womb, and in the glandular portion of her cervix, until you now see how long and stem-like the former has become, and how much the latter has got to look like the snout of a pig. This resemblance is heightened by an ununited transverse fissure of the cervix, resulting from one of her labors, which exaggerates the eversion of the os.

I told you that the final weight and length of the cervix, aided by the jars of the body, completely invert the vagina, which then pulls the gaping lips of the os widely open. Here are my vouchers: As I push the tumor back into the vagina, the eversion becomes less and less; and now, as I force it out by supra-pubic pressure, the eversion is exactly proportioned to the extent of extrusion. Again, the gravity and prolongation of the cervix, aided by the final descent of the womb as a whole, have smoothed out the rugæ of the posterior vaginal wall into mere water-lines. This could not happen from the weight of the vagina alone; nor, in my experience, does it happen in the simple prolapse of the womb, however complete it may be. Finally, this mechanism of descent explains a remarkable uniformity in the length of the uterus in all those cases of elongation in which the womb itself partly descends and the cervix appears outside of the body. Then usually the sound indicates a length of five inches or thereabout,—a limit attributable to the resistance to any further elongation and descent by the anterior wall of the vagina, which measures about two and a half inches in length. This great length of the uterus, by the way, furnishes a good reason for the pain felt by our patient when she reduces the tumor. For, since the fundus is not very much below its proper position, the return of the tumor—necessarily involving that of the cervix—can be effected only at the expense of either an undue stretching upwards of the suspensory ligaments of the womb, or of a forcible bending or retroflexion of the elongated cervix.

You must not, however, infer that in all cases of this affection the fundus will be found so high up in the pelvis as it is in our patient. On the contrary, in the majority of old cases you will find it very much lower down than it would be in health. Occasionally you will meet with a case—such as some of you last week saw in my private room—in which the elongated and heavy womb has finally overcome the resistance of its ligaments. It will then be found in a state of retroflexion, wholly outside of the body and contained in the vaginal sac. By palpation and the uterine sound, such a complete prolapse is easily recognizable. Even to the eye there are presented certain unmistakable marks. For the tumor is then of large size, and, as you will be able to understand from this figure, which I have borrowed from Dr. Taylor's admirable paper, the bulge of the retroflexed fundus makes the posterior vaginal wall hang down below the snout-shaped

Fig. 3.



apex like a dewlap. Nor, on the other hand, is it rare to see cases in which the fundus has apparently not budged from its normal site.

This affection of the cervix is restricted as a rule to the laboring-classes, and especially to those women, such as cooks and laundresses, whose work compels them to stand much on their feet and to lift heavy weights at a disadvantage. It and a host of other uterine disorders have very lately been attributed to an alleged excitation provoked by the treadle motion of the sewing-machine. I do not believe this; to the pure all things are pure, whilst even in the impure the wearisome movements of a laborious trade could hardly awaken, much less content, any sexual solicitation. True, professional operators on the sewing-machine are liable to uterine disorders, but, as a class, so are all seamstresses. Their susceptibility is not, however, traceable to a prurient source, but to the combined effects of bad air, bad food, over-work, close confinement, the sitting posture, and of such accessories as tend directly or indirectly to determine pelvic or portal congestions. Nor do I believe that onanism, in any form whatever, plays an important part in the production of this disease; for all the examples of it that I have seen have occurred in married women with large families.

(To be continued.)

The Odor of the Breath in Diabetes Mellitus (*Berliner Klin. Wochenschr.*, August 26, 1872).—M. Guéneau de Mussy, in the *Gazette Hebdom.*, July 19, says that for several years he has noticed that patients affected with diabetes have a sour breath that smells somewhat like alcohol, or like the heavy breath of the habitual drunkard. In many cases he was able to diagnose the disease from this odor of the breath, and he also noticed that with the decrease in the amount of sugar in the urine the odor disappeared from the breath.

ORIGINAL COMMUNICATIONS.

PRACTICAL HISTOLOGY IN VIENNA.

A COMMUNICATION TO THE BIOLOGICAL AND MICROSCOPICAL SECTION OF THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA.

BY JAMES TYSON, M.D.

(Concluded from No. 57.)

UNSTRIPED muscular fibre was studied in the following manner. A section of fresh intestine of the dog or rabbit was taken, washed by shaking about gently in a very weak solution of bichromate of potash, and then placed in a dark straw-yellow solution of bichromate of potash for three days, during which the solution should be changed at least once. This loosens the connective-tissue net-work, as well as the net-work of muscular tissue, *i.e.* renders the fibres easily isolable. (Any weak acid, as hydrochloric or a .20 solution of nitric, answers the purpose, but the bichromate of potash solution is better.) The muscular coat is then stripped off quite easily, and small portions dissected in the fluid in which the tissue has been macerating. Very beautiful nucleated muscular fibre-cells may thus be obtained, which possess a yellow tinge in consequence of staining by the bichromate of potash.

Of *reagents* a one-half per cent. solution of chloride of gold renders the cells and their bundles more transparent, and the contours of the fibre-cells are more easily followed. There is no effect on the nucleus. Dilute acetic acid renders the nuclei more distinct.

To stain unstriped muscle.—Very beautiful preparations are made by staining, especially with chloride of gold, muscular membrane—as a portion of the stomach of the rabbit—and making sections of the same, which should be made both parallel and transverse to the length of the muscular fibre. In these and all other instances in which preparations to be stained with chloride of gold require washing, this should be done by shaking it about gently in a much weaker solution of the gold, or, what is cheaper, a very weak solution of tartaric acid. The gold staining is then accomplished as described, by mounting the membrane over a fenestra in cork, previous to immersion in the one-half per cent. solution, transferring to acetic acid water, and further hardening in alcohol if the preparation is not sufficiently hard when removed from the acidulated water. The sections are made as before described. It will be easily seen that very different pictures will be obtained in the transverse sections according as they are made through or beyond the nucleus. Beautiful net-works of nerves traversing the muscular lamellæ will also be stained by the chloride of gold. In all cases where sections are not sufficiently transparent, they may be made so by immersing for a few minutes in turpentine, or, better, in oil of cloves, to either of which they must be transferred from alcohol.

Striated muscular fibre was studied in several ways. 1. By maceration for forty-eight hours, more or less, according to the size of the fragments, in a dark reddish-yellow solution of bichromate of potash. It is then dissected with needles and examined. The fasciculi are rendered easily isolable, but are colored somewhat by the bichromate solution, and altogether more altered than by the following methods. 2. Warm small pieces of muscle in a capsule or test-tube containing equal parts of water and one-half per cent. solutions of nitric acid and chlorate of potash, for seven minutes, without boiling. As soon as the fluid begins to vaporize, remove the lamp to a greater distance, but keep up the heat for seven minutes; then transfer to distilled water. The fasciculi become most easily isolable, and may even be shaken apart. The connective tissue is thus dissolved, but less completely than in the next method, and the nuclei of the sarcolemma, as well as of the muscle-substance, are distinctly seen. The latter should be compared with the former. The nuclei in the sarcolemma of muscle are usually smaller than those of the muscular substance, and the latter oftener contain two nucleoli. 3. Boil a fragment of muscle for five minutes in a test-tube, in one part of one-and-a-half per cent. solution of nitric acid, one part of one-and-a-half per cent. solution of chlorate of potash, and ninety-eight parts of water. Place the muscle thus boiled in distilled water twenty-four hours, changing the water once. In this method the connective tissue is completely removed, and even the nuclei of the sarcolemma become invisible.

The distribution of nerves in striated muscle was also studied to a limited extent. This is best studied in animals, in the fresh muscle of those killed by woorara. No special methods were pursued, and many preparations were often examined in the so-called indifferent solution—one-half per cent. chloride of sodium—before nerves could be detected, and no information with regard to their terminations could be obtained. In the fresh muscle of coleoptera, however, as that of the *hydrophilus piceus*, the termination of nerves in the so-called Doyerian plates (*hügel*), and the continuation of the sheath of Schwann (tubular membrane) with the sarcolemma of the muscle, were easily demonstrated. The contraction of muscle is also here beautifully shown.

Alimentary Canal.—Very beautiful sections of the alimentary canal of the dog—œsophagus, stomach, and small intestine—were made by first washing the portion in the very weak chromic acid solution alluded to, hardening in the straw-yellow solution of chromic acid for forty-eight hours, transferring to alcohol for two days, and then making sections in the manner described. These may or may not be afterwards stained with carmine. The yellow coloration by the chromic acid serves also to give the different coats a distinctness not obtained with uncolored preparations. In the case of the small intestine the following layers can be demonstrated with perfect facility. 1. *Epithelium.* 2. *Membrana mucosa.* 3. *Muscularis mucosæ*, or internal muscular coat, composed of two layers,—*a.* circular, *b.* longitudinal. 4. *Submucous connective tissue.* 5. *Muscularis externa*, also composed of two subdivisions,—

a. circular, *b.* longitudinal; and finally, 6. *The peritoneum.*

STAINING OF TISSUES.

Gold Staining.—The general method of gold staining has already been given. Certain modifications must of course be made for special tissues and special objects, as demanded by their size or shape or the points to be demonstrated. Thus, in staining corneæ the period of immersion is longer if it be desired to stain the nerve-fibres than if simply to study the so-called corneal corpuscles, and corneæ of rabbits require, of course, longer immersion than those of frogs. For the former an immersion of as much as three-quarters of an hour was permitted for staining the corpuscles, and one and a quarter hour for nerves. For the latter an immersion of from ten minutes to half an hour was allowed before transferring to the acetic acid solution; the former for corpuscles, and the latter for nerves. In either case the epithelial membrane of Descemet may or may not be removed by pencilling with a camel's-hair brush, or by careful traction with forceps.

In the case of the rabbit's cornea, especially, the stained corneæ may be imbedded and sections made.

Washing is often necessary in order to remove coagula formed by irregular precipitation of the staining substance. This is done by shaking the stained tissue in a test-tube with alcohol, water, turpentine, or other menstruum with which it was last treated.

Again, if it is desired to stain the epithelium and submucous tissue of the intestine of a small animal, as a rabbit, without section of the gut, a portion of the intestine may be filled with the one-half per cent. gold solution, by means of a rubber tube with attached pipette, and allowed to remain thus for ten minutes; then empty and place in the acetic acid solution for twenty-four hours. Further harden, if necessary, in alcohol, imbed, and make sections either of the entire cylinder, or of smaller portions of it, as may be desired.

Beautiful *nerve-preparations* may be made of the tadpole's tail, cutting off a portion, washing in the very weak chloride of gold solution or solution of tartaric acid, staining with the one-half per cent. solution, imbedding, and making sections.

One of the most beautiful manipulations for demonstrating nerves is to fasten a frog on its back, open the abdomen, first inflate the bladder through the common opening of the bladder and rectum, then fill the bladder with the gold solution by means of the rubber tube and attached pipette, allowing it to remain for five minutes, while the exterior of the bladder is kept exposed to a similar solution for the same length of time. Portions may then be cut out and examined in glycerin.

The distribution of nerves in the mucous membrane of the vagina, now claiming considerable attention, is also thus studied. Small portions of mucous membrane are cut out of the vagina of the rabbit, suspended over a fenestra in cork, stained with chloride of gold solution, transferred to acetic acid water for twenty-four hours, and studied in glycerin.

Unfortunately, gold-stained preparations cannot be preserved for any length of time. They are best studied in glycerin, but mounted in this fluid they cannot be relied on for more than a month; though if the cover be cemented by damar lac, they keep even longer. Mounted in oil of cloves, to which they may be transferred from alcohol, and cemented by damar lac, they keep somewhat longer, even a year or more, with little change.

Silver Staining.—It is well known that "silver staining," so called, has this peculiar action, that it affects, not the cell-substance, but a certain intercellular cement, by which the cells seem united, and that it maps out, therefore, districts of cells by staining their periphery. It has its greatest utility in demonstrating the endothelium of blood-vessels, and especially of lymphatics, in serous membranes (centrum tendineum of the diaphragm, pericardium, etc.), but is also used in cornea-staining, in which it marks out the tortuous periphery of the peculiar corneal corpuscles. It is accomplished either by pencilling the organ or tissue of the living animal with a one-half or one-fourth per cent. solution of nitrate of silver, repeating once, keeping in the dark for ten minutes, and then placing in distilled water for twenty-four hours, renewing the water once; or, secondly, by removing the organ either from the living or recently killed animal, immersing in the silver solution in the dark for from one to ten minutes, and transferring to distilled water for twenty-four hours. In all instances the epithelium must be previously removed from the tissue or organ to be stained; which is very easily done by the simple friction of a camel's-hair brush, or by wiping the epithelial surface with a dry cloth. The most successful preparations of this kind I have ever seen were made from the central tendineum of the recently killed rabbit, by Dr. Klein, at the Brown Institution, London. The demonstration of the lymphatics and lymph-spaces was perfect. The preparations are best examined in glycerin, in which they may be preserved for a short time. Nitrate of silver injections of small blood-vessels, as those of the kidney of a rabbit, are also made by means of delicate glass pipettes connected by an India-rubber tube with the syringe carrying the one-half per cent. solution. The manipulation is delicate.

Preserving specimens.—The favorite menstruum at present used in Vienna for mounting all preparations, except the silver and gold stained tissues, is the *damar lac.* To this, preparations are directly transferred from turpentine or oil of cloves, the excess of these being removed by momentary contact with bibulous paper, covered, and allowed to dry; the excess of damar at the edge of the preparation answering at once for cement and wall of the cell. Preparations which have been previously surrounded by watery solutions or glycerin must of course be washed in alcohol before they can be placed in turpentine or oil of cloves; nor can preparations be directly transferred from alcohol to damar lac, but must first pass through turpentine or oil of cloves. For preparations previously immersed in aqueous menstrua, which do not admit of transfer to alcohol, and thence to turpentine or oil of cloves, glycerin is used, and the cover cemented with the damar lac.

Oil of cloves is also much used for mounting, and is the favorite medium for making sections transparent which are not sufficiently so. For this purpose it is more satisfactory than turpentine. An immersion of from a few seconds to several hours is permitted, and sections may remain in the oil of cloves until mounted in damar.

ON THE EFFECTS OF THE BROMIDES IN EPILEPSY, WITH SPECIAL REFERENCE TO THE BROMIDE OF POTASSIUM.

BY M. GONZALES ECHEVERRIA, M.D.,

Late Resident Physician to the New York City Asylum for the Insane, Ward's Island, N.Y.; Consulting Physician to the New York Hospital for Epileptics and Paralytics, etc. etc.

(Concluded from page 136.)

LARGE doses of bromide of potassium do not operate favorably when suddenly administered in the commencement of the treatment; but in all cases it is necessary that epileptics should be brought occasionally under the full physiological effects of the bromide of potassium, and then discontinue it until the effects of the bromide have subsided; then resume the ordinary doses of the salt, and again increase them when the attacks recur, in order to secure a permanent arrest of the disease. Tolerance of the bromide by constantly using larger doses than one drachm in twenty-four hours, when the fits are checked, should be avoided. Nor should the dose be ever augmented and thus prolonged, unless the condition of the patient indicates a threatening attack, or it is required by the severity and frequency of the fits. Epileptics only exceptionally bear more than one drachm of bromide of potassium, daily continued, without soon exhibiting symptoms of bromism.

It is of the utmost importance, when the fits have disappeared for several months, and recovery seems perfect, not to stop suddenly the use of the bromide of potassium, but to decrease its quantity, and to discontinue it in the slowest manner, after a protracted treatment, and seeing every indication that the epileptic habit has been overcome.

I have resorted for several years past to hypodermic injections of strychnia to promote a regular capillary circulation, and remove chilliness and pain from the extremities, or to bring about a rapid healing of atonic ulcers and eruptions in the limbs of inveterate epileptics and paralytics. I have also employed strychnia in such hypodermic injections as a vaso-motor stimulant and tonic, and several cases illustrating their efficacy are published in my work on epilepsy.

Sanson, in 1868, and Brown-Séquard more recently, have called attention to the antagonism of bromide of potassium and strychnia, but they have not alluded to the usefulness of strychnia to remove the above symptoms. Brown-Séquard states that strychnia counteracts the effect of the bromide, preventing the appearance of the bromism. My attention has not been attracted by any antagonistic action between the bromide and strychnia, in any of the cases where I have jointly administered them; but I have never employed, like Brown-Séquard, one-third of a grain of strychnia in conjunction with one hundred and thirty-two grains of bromide in a day,—the largest dose of strychnia I have injected subcutaneously never reaching beyond one-fortieth of a grain.

One of the simplest and safest ways of preventing bromism is by repeated administration of strong coffee. I order coffee always as a medicine and as an important part of the epileptic's diet, for it stimulates the brain, specially opposing itself to rapid disassimilation, and thereby lessening structural changes. In addition, the operation of the bromide is helped by coffee drunk with meals or throughout the day, and in this wise the supervention of bromism is very much delayed, epileptics being thus enabled to take twice as much bromide without the necessity for suspending it, which I deem important to secure the arrest of the disease. I have most closely watched the effects of coffee in epilepsy, and I have every reason to believe that it does not produce any of the evils generally deprecated. On the contrary, epileptics accustomed to it experience a comfortable feeling, and ask for it to rouse themselves from weakness and depression. If administered immoderately from the beginning, it may not be borne with ease, and may, like all stimulants, originate unpleasant effects.

It has been advanced by Duckworth, Williams, and others, that tuberculosis is hastened by the bromide of potassium. I have investigated the relation of pulmonary tuberculosis and epilepsy, and undoubtedly the generation of tubercles in the lungs is favored by the lesion of the medulla oblongata proper to epilepsy. I have traced the pulmonary trouble from its inception, and feel convinced that the association is more than a casual coincidence of the two morbid conditions, the striking frequency of tubercles or other pulmonary lesions I have met with in the post-mortem examinations of epileptics strengthening my belief.

Finally, it is interesting to notice that, while the narcotic effects of morphia injected subcutaneously to assuage pain in labor may operate actively upon the fœtus, conium and bromide of potassium appear free from noxious influence on the fœtus, when given to the mother. One epileptic woman took daily, throughout gestation, one drachm of bromide of potassium in tincture of sumbul, and had not one single fit. Another woman was troubled with three attacks during the last two months of pregnancy, and on each occasion the dose of bromide had to be raised, during a short period, from twenty to thirty grains thrice daily. In another case, during the last four months of pregnancy ninety grains of bromide of potassium were administered daily against nocturnal attacks, attended with *petit mal* in the daytime. The bromide in these last two cases was exhibited with fluid extract of conium and Fowler's solution. In the fourth case the bromide administered in the beginning, in twenty-grain doses three times a day, was, during the last four months of pregnancy, respectively carried up in each of them to forty, fifty, sixty, and seventy-five grains three times a day,

with one and a half fluidrachms of Squibb's extract of conium. In none of the foregoing four cases was the fœtus injured by the bromide. The children borne by the first two women are respectively five and six years old, and that of the last woman, a very lively boy, was sent to the Infants' Hospital about three months after his birth.

I may establish the following conclusions from the foregoing clinical facts:

The bromide of potassium operates actively in a paralyzing manner on the excito-motor power of the sympathetic and spinal nervous system, and produces cerebral congestion. The hypnotic and sedative properties of the bromide of sodium and bromide of calcium appear to be weaker than those of the bromide of lithium, which I have found in its turn a less active sedative than the bromide of potassium. The bromide of ammonium stimulates at first and then congests the brain, bringing about stupor in lower doses than any of the other three bromides here mentioned. The bromide of cadmium exerts no direct action on the nervous system, being a most powerful emetic and purgative, capable of causing, in very small doses, extreme depression.

The bromide of potassium is not a *specific* for epilepsy, but may contribute most efficiently to arrest the fits by suspending reflex excitability of the spinal cord in a more uniform and active manner than any of its kindred salts.

The benefits of the bromide of potassium increase and are better secured by administering it combined with conium, ergot, arsenic, and strychnia.

Sixty grains is the average daily amount of bromide of potassium required in ordinary cases of epilepsy; but it is necessary to keep epileptics, at different intervals during the progress of their attacks, under the full physiological effects of the bromide, to suspend it until the bromism is dispelled, and then to resume the salt again in ordinary doses.

The bromide of potassium alone exerts little or no effect on the attacks of *petit mal*, unless associated with large doses of ergotine (gr. vj to gr. xvj) and conium. In epileptic insanity, or in any other form of insanity, the hypnotic and sedative properties of the bromide of potassium are usually unavailable when the salt is administered alone, a refreshing sleep and subsequent quietness being more readily obtained when the bromide is prescribed along with some narcotic, such as conium, cannabis indica, hyoscyamus, and still better with full doses of ergotine.

The bromide of potassium should never be discontinued suddenly, even when the epileptic fits have not recurred in a long time, but the dose of the salt should be gradually decreased, and the treatment left off insensibly, when there is every indication of the complete eradication of the epileptic habit.

Nothing proves that the efficacy of the bromide of potassium in epilepsy bears any relation to the existence or severity of the bromide eruption. Arsenic prevents or mitigates it, and acts further as a valuable tonic. Subcutaneous injections of strychnia are the most efficient remedy to re-establish the depressed peripheral circulatory activity, and to operate also as a stimulant in epilepsy.

Coffee is one of the best means of correcting the unpleasant action of full doses of the bromide; it favors its effects, is in addition an invaluable cerebral stimulant, and should always constitute an important part of the epileptic's diet.

Bromide of potassium, when taken by the mother in large and prolonged doses, does not seem to have any noxious influence on the fœtus.

PERSONAL REMINISCENCES OF STATISTICAL RESEARCH.

BY ROBERT P. HARRIS, M.D.

IT may be of interest to the readers of the *Medical Times*, as it has been to a few intimate friends, to hear some of my experiences in the work of recalling from the past the lost or forgotten records of the Cæsarean operations of the United States,—a labor which, although not satisfactorily completed as yet, has very nearly approached this desired end. My first work was the dull, tedious, and unsatisfactory one of consulting the various medical journals, effete and extant, of our country, and some of the English and French journals which are known to have had occasional contributions from this side of the Atlantic, prior to the publication of our own medical periodicals; and to separate for rejection all cases reported as *Cæsarean* which were not the subjects of true *gastro-hysterotomy*.

At the very commencement I came upon the first American case, reported by Fleetwood Churchill, and credited to "*Mr. Cellen, New York.*" I opened a correspondence with parties in that city, examined the journals in our libraries, and finally, from a correspondence of dates, etc., became satisfied that there was no Mr. Cellen; that the case credited to him was operated upon by the woman herself; and that the ground for this name was the fact that the case was reported by Dr. Bassett, of Nassau, before the Rensselaer County Medical Society, *Dr. McClellan* being the presiding officer on the occasion.

This experience decided me to regard the work of no predecessor, but to commence *de novo*, and thoroughly examine every report, and as far as possible every State, and into the foundation of the various current rumors, some of which have been thoroughly credited for years past. One of the first of these reports that came to me was from Cincinnati; a gentleman having assured me of its truth, and stated that he passed the residence of the lady at the time of her illness and learned the fact of the operation from a neighbor. A thorough research has satisfied me that Cincinnati has yet to have her first Cæsarean case, notwithstanding that a gentleman long resident in this city was pointed out to me years ago as having been delivered from his mother by this operation.

Lancaster, Pennsylvania, was the seat of another rumor, as reported by Dr. Joseph G. Nancrede, in 1835, in his account of Dr. Gibson's first operation upon Mrs. Reybold, of Philadelphia. A careful in-

vestigation leads me to believe that neither in Lancaster nor in the county has a case occurred.

But the best apparently authenticated case came from Bradford County, where a certain well-known judge, of French parentage, who died a few years ago, at an advanced age, was always believed to have been taken from the abdomen of his mother by a French surgeon, the lady surviving the operation a number of years. The story came to me from a neighbor of the judge, and I was in great hopes it would prove correct, as it would have given to Pennsylvania the oldest operation of the Union; but I was doomed to be disappointed, for I succeeded in finding the physician of the judge, a lady who was present at his birth, and a second doctor, who had examined the abdomen of the mother, and, expressing surprise at not finding the cicatrix, was told that there had never been the least foundation for the current story. The family physician of the judge had heard the report for more than thirty years, and allowed it to pass without question, until after he received my letter of inquiry. So generally was this old rumor credited, that I received, just after I had ascertained the truth, a letter from the town where the judge resided, in which a physician assured me in strong terms that Madame L. had been operated upon as the report stated. As I had ascertained the truth, I thought it due to the doctor to convince him of his error, and through him set on foot a counter-statement. The French doctor was fond of a little excitement, and probably said something at the time of the birth, out of which grew the report in question, and, as he returned to France soon afterwards, it failed of a contradiction on his part, which it might otherwise have received.

It is often less difficult to find out the truth of a rumor than to discover a lost case, as I know to my regret in several instances where the operations were successful and the names of the surgeons given. The late Dr. Elias Samuel Cooper, who died in San Francisco in 1862, went to that city in 1855, from Peoria, Illinois, where he had operated upon a German woman, who was said to be still living in 1862. Dr. Cooper never reported anything in regard to this operation but the fact, and that the woman was residing in Illinois; his second operation was in San Francisco, and was also successful. Here the matter still rests; for, with all my letters to California, Ohio, Indiana, and Illinois, I have never been able to find any one who had ever heard where the operation had taken place; but I do not entirely despair yet, as my next letter from California may perhaps throw some light upon the subject.

It is probable that the Cæsarean operation was first performed by French surgeons in Louisiana, and possibly before the year 1803, when it became a State. That it did precede the other States is generally believed, and with reason; but the whole of the cases thus far belong to the dead past, except one, where Dr. Prevost, of Donaldsonville, is reported to have performed the operation several times with success, upon a mulatto, who died under the last infliction. This report has given me a great deal of trouble, and is still, at the end of two years, where I first found it, with no better prospect of entire exhumation than there was then. My work has satisfied me that unfavorable cases are more readily attainable than those which have terminated favorably. This is particularly unfortunate just now, as the excessive mortality of the last four years has given a preponderance of death in my whole table, when the favorable cases sought for would more than counterbalance them, making the successful operations 37 and the fatal 34, instead of 31 and 33, as they stand now. It is somewhat singular that in Great Britain, where there have been 107 cases and only 18 recoveries, there should have been 2 recoveries out of 9 operations in four years, against but 1 recovery out of 9 in the same period in the United States, where out of the first 25 reported cases there were 15 recoveries. The two successful foreign operations were both performed in Scotland, and promptly resorted to. Our own cases were *mostly* either very late in performance or in very unfavorable subjects, and decidedly below the average in this respect.

One of my chief sources of disappointment in obtaining information by correspondence arose from the fact that the term *Cæsarean* appeared to convey no very definite meaning to the minds of those addressed, and I was constantly annoyed by finding, after a thorough search for a reported case, that it was one of gastrotomy following rupture of the uterus, the opening of an adherent and perhaps inflamed extra-uterine cyst, or something equally foreign to the question, and of a decidedly different measure of gravity. Even professors in medical schools, judging from their reports, did not appear to be aware of the fact, that to constitute a Cæsarean operation we must not only incise the abdominal walls, but cut into the cavity of the uterus through the abdominal wound. Thus, out of eight cases reported by two physicians, I was, after a considerable waste of time and trouble, obliged to reject all but one. One of those rejected was the operation of a surgeon long since dead, which his son, also in the profession, assured me had been one of gastro-hysterotomy. Not feeling perfectly satisfied with the particulars obtained, I pushed my researches until I finally met with, in print, a letter from the operator to the late Prof. Meigs, proving the case to have been gastrotomy after uterine rupture.

This form of gastrotomy is certainly less fatal than gastro-hysterotomy, and cannot with any propriety be regarded as Cæsarean, or permitted to enter into the statistics of the latter operation. It is, if anything, a more important surgical procedure, as it tends to save the life of a class of subjects not bodily deformed, or apparently diseased, and ought to be much more frequently resorted to than it is. Drs. John Neill and William Byrd Page, of this city, have each performed it with success, upon cases which were certainly far from promising at the time of the operation.

We hear also of the *vaginal Cæsarean operation*, meaning either *hysterotomy*, for the relief of uterine occlusion or otherwise uncontrollable rigidity, or the *vagino-cystic section*, as performed with safety to

the mother and an extra-uterine fœtus, in 1816, by Dr. John King, of Edisto Island, South Carolina. *Gastro-elytrotomy*, fortunately, has a special title, and therefore cannot be confounded with those mentioned.

If statistics are to be of any value in establishing a *prospective recovery scale* after capital operations, then they must be rigidly kept to one special line of cases, and no trouble must appear too great in the eyes of the worker, that may be necessary to weed from his rough notes every case not thoroughly established upon reliable testimony. When I entered upon the self-imposed task related in this paper, I felt satisfied that the general opinion in this country with regard to the high mortality of the operation in question was too much influenced by the want of success in the British Isles; an idea which, by making the "section" a matter of dire necessity instead of election, had a tendency to vastly increase the mortality, by postponing the resort to the knife until too late to save life, except in a small proportion of cases; and I think I have established the fact that promptness of operation in the United States will save a large proportion of both women and children. But for the fact that this operation is frequently performed upon those who are extremely dwarfed and crippled, I see no reason why it might not be made to approach the measure of success known to have resulted from gastrotomy after rupture of the uterus,—*i.e.* 75 per cent. saved, as proved by the valuable researches of Dr. Trask, of Brooklyn.

This operation has been of more frequent performance in the United States than gastro-hysterotomy, and is one which is oftener required to be done, in fact very much oftener, than it is resorted to. If it were generally performed after rupture, there would be a much less mortality as a consequent of the accident than there is now.

SKIN-GRAFTING AS A TREATMENT OF INDOLENT ULCERS.

BY W. H. PARISH, M.D.,
One of the Resident Physicians to the Philadelphia Hospital.

Read before the Philadelphia Hospital Medical Society, June 1, 1872.

INDOLENT ulcers, especially when occurring on the anterior surface of the leg, are so frequently exceedingly indomitable under our most approved methods of treatment, that we willingly, though not very confidently, give trial to any new remedial measures that may be brought to our notice.

The transplanting of minute portions of healthy integument on to the granulating surface has been now tested by numerous surgeons, and the fact that these grafts will, under favorable circumstances, unite with the tissue of the ulcer and form so many *foci* of cicatrization, has been well established.

The degree of success, however, as compared with that obtained by other modes of treatment, seems as yet but indefinitely ascertained; and the kind of ulcer to which this treatment is or is not applicable is not clearly set forth. These points can be elucidated only by extended experience and close observation.

I have adopted the grafting process in ten cases, and in each case one or more of the grafts retained vitality and became encircled with cicatrization, evidently aiding materially in the healing of the ulcer.

These ulcers were all on the anterior portion of the leg, and were all, with the exception of one, of several years' duration. Not one of them was dependent on a syphilitic taint, and I was careful, by appropriate preparatory treatment, to secure as healthy a condition of each as seemed practicable. If there was too much inflammation, as indicated by a reddened, angry appearance of the ulcer and the integument around, the degree of inflammation was reduced by rest and the usual antiphlogistic means. If there was a tendency to the formation of a slough, this tendency was first removed. If there was an appearance of extreme sluggishness, stimulant applications were made for a few days.

I would especially call attention to the importance of freeing the granulating surface of any diphtheritic membrane that may be present. My first case, a man, presented this condition over the entire area of the ulcer, it being about the size of the palm of the hand, and of six years' duration. At first the exudation was not observed. On the twelfth day the grafts, failing to take root in the granulations, had entirely disappeared. Now removing the false membrane, which came away in strips, some about four lines in width, and applying new grafts, a favorable result was obtained. In a few days the ulcer was dotted with several islands of cicatricial tissue; and the healing was entirely effected in a few weeks.

In one other case this pseudo-membrane existed. In both it bore a resemblance to the false membrane of croup. The granulations could be seen, but with their florid hue changed by this drab-colored semi-opaque covering.

After having prepared the ulcer, I, with forceps and scissors, clipped, usually from the inner side of the arm, a portion of the integument measuring about three by four lines, and sufficiently thick to comprise the true derm. This section I cut with scissors into eight or ten pieces. Each piece was placed on the granulating surface, the epidermis being uppermost. These pieces were then pressed against the ulcer and held *in situ* by strips of adhesive plaster. The entire ulcer was covered with similar strips, and the limb surrounded with a bandage.

This dressing was permitted to remain for two or three days, when the plaster was found in position, but no longer adherent to the granulations, being loosened by the discharges. The grafts at that time could be detected as pale, transparent specks among the florid granulations. The same dressing was continued, usually until the ulcer was healed, being reapplied every two or three days.

During the early portion of this treatment the patient was confined to his bed, and when permitted to sit up was required to keep the leg elevated, and was strictly enjoined not to walk much, nor to stand long at a time until after the cure was obtained.

On the sixth or ninth day the transplanted integument will present a pinkish appearance, and close observation will find evidences of union and vitality. Do not, however, pronounce the attempt a failure too hastily if these appearances cannot at that time be discovered, for a point of cicatrization may be hidden among the granulations, to come to light in a few days. In one case, on the twelfth day after I did the first transplanting, I did a second, having lost sight entirely of the grafts. But on the fifteenth day, again looking at the ulcer, I found two of the first grafts distinct, and cicatrization established about them. Some of the second took hold, and the process went on to a cure.

The length of time occupied in the cure of an ulcer, under whatever treatment, seems to be so much influenced by the individual character of each ulcer, and every attempt at a description of its characteristics always so decidedly unsatisfactory, that no one without a personal experience extensive and varied can form an opinion as to the comparative value of this curative process.

However, after a rather protracted service as interne in the surgical wards of this hospital, which is a favorite resort of leg-ulcers, and with ample opportunities to observe and adopt various kinds of treatment, I am inclined to look with decided favor on this plastic operation, and to think that in many cases a cure may in this manner be greatly hastened.

MORBID ANATOMY OF THE EPIZOÖTIC.

(Communicated by FRANK WOODBURY.)

PROF. GROSS, at the Jefferson College clinic, recently exhibited the post-mortem specimens obtained from a horse which died during the late epidemic, upon which he made the following remarks: "The horse was of medium size, and fourteen years old; he had been previously healthy during seven years in the service of Dr. Maxwell, his last owner. During the prevalence of the horse disease he suffered in common with his solipede brethren, and, although treated with the greatest care, he relapsed, when apparently convalescent, and died. This may be taken as a typical case of death from the disease, complications having been avoided by the treatment.

"The examination, carefully made by Mr. West, disclosed a large quantity of serous fluid in the thoracic cavity; the lungs were partially adherent, and a section sank in water, showing a condition of infiltration or hepatization. In the trachea and larger bronchial tubes spots of lymph and numerous ecchymoses indicated the severity of the inflammation, and the mucous membrane, as far as the anterior nares, was discolored and covered with a muco-purulent secretion. Many of the bronchial lymphatic glands were enlarged. There was no evidence of disease discovered in the œsophagus or remaining viscera, and death evidently resulted from pleuro-pneumonia. The sweeping character of this disease and its rapid spread over the continent lead me to consider it of the nature of dengue. It is not communicable by ordinary contact; the morbific germs float in the atmosphere, making it epidemic rather than contagious."

THE INFLUENCE OF ALCOHOL UPON THE TEMPERATURE OF THE HEALTHY HUMAN BODY (Professor Binz, of Bonn: *Virchow's Archiv*, vol. liii., part 4, 1871).—The old opinion that alcohol in the form of spirituous liquors increased the temperature of the body has been altered in later days by experiments. From experiments performed on the lower mammals it appears that the temperature is decreased by the introduction of alcohol into the system, though by no means to a dangerous degree. Respecting the human mammal the question has remained undecided, until recently one of Prof. Binz's pupils, Dr. Mainzer, has performed a series of experiments, mostly upon himself, for the purpose of determining the facts concerning the action of alcohol upon the temperature of the human body. The empirical statements of Todd had already rendered it probable that alcohol does not increase the temperature of the fluids of the body. Dr. Binz gives the results of his pupil's labors as follows, and says that nothing has been neglected to make the experiments perfect. Thirty observations, three to four hours long, were made, after which twenty-four were made upon Dr. Mainzer, and six upon one of his companions.

Both are healthy men, and accustomed to the use of alcohol in the daily enjoyment of the German national drink.

The observations were made upon Dr. Mainzer and his friend while undressed, lying in bed, with light covering thrown over them. The temperature was taken by means of a thermometer inserted into the rectum. This remained in the rectum twelve minutes,—being inserted every fifteen minutes.

The time for making the observations was from 7 to 10 in the forenoon, from 3 to 7 in the afternoon, and from 9 to 12 in the evening.

The alcohol was 98 per cent., and the quantities taken were 15, 40, 50, 75, and 80 cubic centimetres. It was usually mixed with twice or three times its bulk of water.

Mainzer concludes his labors with these words: "No important change in the temperature of my body can be discovered after drinking 98 per cent. of alcohol in doses of 15 to 80 cubic centimetres." Mainzer's friend appears to have been somewhat more sensitive to the effects of alcohol, and his temperature fell relatively lower, although *no toxic influence* of alcohol was observed. These results agree with those already obtained by Ringer and Rickards from experiments upon the human body.

Neumann obtained similar results from experiments upon rabbits; in which the administration of alcohol produced the characteristic effects more slowly in those already accustomed to its use by previous experiments.

Bouvier has drawn the conclusion that alcohol can reduce the temperature of the body in fevers only when given in continued and *not small* doses.

It is yet an open question when this administration of alcohol should occur. That under certain circumstances it may prove beneficial, Manassëin and Bouvier have shown upon septicæmic animals. Mainzer thinks that his experiments prove that alcohol cannot produce objective heat in the human economy, but that, on the contrary, it brings about a decided diminution of the temperature. [See also an article on this subject in the *Times* for October 5, 1872, p. 13.]

PHILADELPHIA
MEDICAL TIMES.
A WEEKLY JOURNAL OF
MEDICAL AND SURGICAL SCIENCE.

The Philadelphia Medical Times is an independent journal, devoted to no ends or interests whatever but those common to all who cultivate the science of medicine. Its columns are open to all those who wish to express their views on any subject coming within its legitimate sphere.

We invite contributions, reports of cases, notes and queries, medical news, and whatever may tend to increase the value of our pages.

All communications must bear the name of the sender (whether the name is to be published or not), and should be addressed to Editor Philadelphia Medical Times, care of the Publishers.

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SATURDAY, DECEMBER 14, 1872.

EDITORIAL.

THE ANNUAL REPORT OF THE SURGEON-GENERAL U.S.A.

THIS concise and business-like document, now before us, contains some facts of general interest, and some which will specially engage the attention of members of our own profession. We will mention them in this order.

The United States army consisted, during the fiscal year ending June 30, 1872, of an average strength of 24,101 white and 2494 colored troops,—making 26,595 in all. During the year, this force required the disbursement, for medical and hospital purposes, of $177,753.66.

Among the white troops the cases on the sick-list amounted to a proportion of 1974 per 1000, or nearly two entries for each man during the year; of this, 1671 per 1000 were cases of disease, and 303 per 1000 were wounds, accidents, or injuries. Among the colored troops the proportion on the sick-list amounted to but 1409 per 1000, viz., 1178 cases of disease, and 231 of wounds or accidents.

Among the white troops the proportion of deaths was 15 per 1000,—11 per 1000 of disease, and 4 per 1000 of wounds or injuries,—1 in 130 of the cases treated. Among the colored the deaths were 22 per 1000, viz., 18 per 1000 of disease, and 4 per 1000 of wounds,—1 in 65 of the cases treated.

The discharges on "Surgeon's Certificate of Disability" were, among the white troops, 846, or 35 in 1000 of mean strength; among the colored, 76, or 30 in 1000 of mean strength.

Now, when we look at these figures, the first impression would be that the colored troops were the hardier, since they had 565 per 1000 fewer on the sick-list in the year. On reading further, however, we find that the proportion of deaths from disease was twice as great among the colored as among the white troops, while that from all causes was 1 in 65, to 1 in 130 among the white. The explanation of these differences would perhaps appear if a statement were made of the service on which the sets of troops were respectively engaged, the facilities of obtaining supplies, the forms of disease prevalent, and some other modifying circumstances which may not now suggest themselves.

Some of our readers will doubtless be surprised to learn that during the last year (seven years having elapsed since the close of the war) 28,481 applications for information, "chiefly in regard to the cause of death or discharge from service, and the hospital history of soldiers dead or disabled during the war of the rebellion," have demanded attention at the record and pension office.

The Army Medical Museum has been enriched by the addition of 1022 specimens. The library contains 19,000 volumes and 7000 pamphlets.

A curious fact appears in the following statement:

"The number of applications approved during the year for artificial limbs or commutation for the same was as follows:

COMMUTATION.		LIMBS IN KIND.	
Legs	148	Legs	75
Feet	7	Feet	4
Arms	219	Arms	27
Apparatus	132	Apparatus	1"

We trust that such action will be taken by Congress as will provide for the early distribution of the first portion of the Medical and Surgical History of the War. This great work, which has been carefully prepared under the supervision of the intelligent attachés of the Surgeon-General's office, will form a most important addition to our professional literature. We cannot but feel a pride in the volumes already issued from the same source, which, for accuracy, scientific value, and elegance of execution, have been at least equal to those of older countries.

In concluding this notice, which we trust will not seem longer than the importance of its subject warrants, we must allude with some surprise to the large number of vacancies in the service,—fifty-nine, four of which are surgeoncies, and *fifty-two* assistant-surgeoncies. The report justly urges the necessity of filling up the medical corps to the

number provided for by Congress in 1866; a recommendation which it is to be hoped will have due weight.

THE FEE-BILL.

PHILADELPHIA stands alone among cities in the possession of a rigid fee-bill, carrying a certain weight of authority as having been adopted by the College of Physicians, and employed as a guide by many practitioners in making out their accounts. We have so recently alluded to the matter of compensation for medical services, that we need hardly go over the general ground again, but would urge once more the absurdity of assuming that the value of every man's professional attendance is the same, and to be charged for at the same rate. Skill, experience, reputation,—all these should be worth something pecuniarily, and the public would recognize the fact if the profession did. It is recognized by the army and navy authorities of every civilized country, in the increase of rank and pay accorded to medical officers in proportion to their length of service. Again, to reckon by visits only, without regard to the varying trouble and responsibility involved in different cases, or to the ability of the patients or their friends to pay, is manifestly absurd.

In point of fact, the fee-bill, if binding at all, is so only upon the Fellows of the College of Physicians. It is practically disregarded by many of them, and indeed must be, unless those who attain success in business are willing to be overworked and underpaid. Lawyers have no such tariff; they charge what they can get,—that is, what the public consent to pay them for their services.

Let us suppose the fee-bill done away with entirely: who would be the worse off? Surely not the physician, for he knows well what his professional brethren consider the average value of their services, or he can readily find out; and he can tell what his investments in labor, time, money, and the acquisition of skill and experience have been. As surely not the public; for they must, by an inexorable law of compensation, if they want underpaid doctors, have inefficient ones. We think the results of observation in other departments of skilled labor will show that, in the long run, good work must be well paid for, or the energy and ability it demands will flow into other channels.

It is earnestly to be hoped that this futile fee-bill may be abolished altogether at no distant day.

DR. ANGUS MCLEOD, an East Cambridge physician, was arrested, December 6, for concealing a case of smallpox.

PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THURSDAY EVENING, OCTOBER 24, 1872.

(Continued from page 156.)

DR. JAMES TYSON exhibited the following specimens:

1. *Aortic and mitral disease; perforation of one leaflet of the mitral valve.*

T. McF., shoemaker, intemperate, aged 40, single, born in Ireland, was admitted to the Philadelphia Hospital January, 1872. Parents quite healthy. Has already been in the house nine different times, exclusive of the present admission, for the same ailment. He has suffered much from inflammatory rheumatism, and at certain periods of his life had typhus and intermittent fevers. In 1860, after two severe attacks of rheumatism, he noticed a failure of strength and shortness of breath, and an inability to lean forward, run, or lift anything, without getting unpleasantly out of breath. Two years afterwards he applied for treatment at the Northern Dispensary in this city, where he was told, for the first time, that his heart was diseased. Since then the symptoms have increased in intensity. He has occasionally had swelling of the feet, knees, and hands, but no two members were ever swollen at the same time. Cough sometimes troubles him; he sleeps very well.

May 21.—On physical exploration, inspection reveals a concavity produced by depression of the lower two-thirds of the sternum and the attached costal cartilages. There is at present no undue movement of the chest. The seat of the impulse is less than an inch to the right of the nipple, where there is no marked upheaving produced. The superior border of the heart's dulness is in the fourth interspace. The right lateral border is between the middle of the sternum and its left edge, whence it extends half an inch to the left of the nipple. Inferiorly the tympany of the stomach is noted in the sixth interspace.

Auscultation reveals a double rasping murmur heard over the entire organ, but more loudly at the base.

He remained in the house during the entire summer, scarcely at all relieved by any treatment which could be suggested. For two weeks previous to his death he was the subject of an obstinate dysentery, and one week before he died there supervened an acute purpuric condition of the extremities, which made its appearance in a single night.

Post-mortem examination.—The body was œdematous throughout. There were numerous purpuric spots on the extremities, most abundant upon the hands and feet.

On section, the *pericardium* contained something more than the normal quantity of fluid. The *heart* itself was enormously hypertrophied, weighing 27 oz. when emptied of clots, and presented two opaque white patches on its exterior, one about an inch in diameter over the right ventricular surface, and a second half an inch by an inch and a half over the left ventricle, near its apex. The aortic valves were enormously thickened, the deposits on the edges of two of them having undergone calcareous change; one of the cusps was perforated at its base by an opening half an inch in diameter, the edges of which were formed by a ring of cauliflower-like deposit of calcareous matter. The mitral valves were also greatly thickened, and contained deposits on both surfaces, those on the auricular face of the valve having undergone calcareous change. The tricuspid valve was also thickened, but the pulmonary cusps were normal.

The *liver* was enlarged, weighing 4 lbs. 3½ oz.,

and was also fatty. The *spleen* was normal in size, but was somewhat nodulated in its upper extremity and presented, in this situation, an infarctus the size of a horse-chestnut, most probably the result of capillary obstruction caused by an embolus from the valves of the heart.

2. *Chronically contracted kidney.*

P. D., aged 52, a native of Ireland, and intemperate; considered himself a well man until January, 1871, for a number of years before which date he was engaged in driving a hack night and day, being often subjected to the severest exposure. At this time he was taken with a shortness of breath and a cough, notwithstanding which he continued to pursue his occupation until July of this year, when he entered the house for the first time. In April he first noticed a swelling in his feet, which gradually became worse, until his thighs and genitals became involved. He remained in the house four weeks, during which time there was apparently no improvement. Returning to his home, he continued to grow worse, and re-entered the wards early in September, when he presented œdema of the extremities, genitals, and abdomen; he had also a cough and much shortness of breath.

Examination of the urine, September 17, 1872, gave the following result:

Quantity in past twenty-four hours 30 oz.; reaction acid; sp. gr., 1020; quantity of albumen very slight. The microscope revealed granular and hyaline casts, some of which contained fragments of epithelial cells. He was ordered solution of acetate of ammonia and tr. chl. iron thrice daily, with nourishing diet and stimulants. The amount of urine passed continuing the same, cloths steeped in inf. digitalis were applied to the abdomen; for a few days the urine was augmented in daily amount, but soon fell to 25 oz. in the twenty-four hours.

October 4, 1872.—His face is swollen, and he is enormously œdematous in legs, thighs, genitals, arms, hands, and thoracic and abdominal walls. There is also ascites, and effusion into left pleuritic cavity. The lungs are also suffused with moist râles, and his dyspnœa aggravated, especially during paroxysms of coughing, when his face becomes livid. He was ordered a stimulating expectorant mixture.

October 8, 1872.—Condition not materially changed, except that he has less difficulty in breathing; respiration is, however, still labored. For the last few days he has had diarrhœa, during which the œdema has slightly decreased.

He died suddenly on the morning of October 10.

The *post-mortem examination* was made three hours after death. There was general œdematous infiltration of the connective tissues, ascites, and left hydrothorax; firm adhesion of the entire right lung to the corresponding chest-walls. The lungs were, however, normal.

The *heart* was enlarged, weighing 18 oz., its cavities dilated, and walls firmer and thicker than in health. The edges of the mitral valve were thickened, and a few small atheromatous patches were on its auricular surface. The aortic valves were unchanged, but the aorta itself was the seat of atheromatous deposit. The valves of the right cardiac cavities were unaltered.

The *liver* was small, weighing 2 lbs. 3 oz., "nutmeg" in appearance, yet very firm. The spleen was very small and contracted, weighing but 2½ oz., its trabecular tissue unusually distinct.

The *kidneys* weighed conjointly 9½ oz., and exhibited the same peculiar firmness noted in the case of the other tissues, but even more marked. The capsule was adherent, and when stripped off exposed a granular surface. On section, the appearance could scarcely be said to be other than normal, though upon fracture of the organ the granular appearance was again evident.

Remarks.—It is not unimportant to observe that the extensive dropsy so uncommon in connection with this form of Bright's disease (the contracted kidney) is accounted for in this instance, at least partially, by the cirrhotic liver also present.

3. *Cancer of cardiac and pyloric orifices of the stomach,* from H. W., aged 70, a Pennsylvanian. He has been apparently healthy, except as to occasional attacks of rheumatism, until about the middle of June, 1872, when he began to complain of a dull burning pain in the epigastrium, which continued and became worse after eating, when a sense of distention and weight was superadded. Later, he vomited his food, and complained of nausea at other times, especially in the morning before eating. Occasionally, also, he vomited small quantities of blood. His bowels were obstinately constipated, being often without a dejection for five or six days.

There was exquisite tenderness on pressure in the epigastrium, and percussion-dulness in the median line two and a half inches below the end of the ensiform cartilage, and thence towards the left to the edges of the ribs, and towards the right as far also as the edges of the ribs, but an inch lower down. There was, however, no sense of a tumor communicated on palpation.

About the 10th of September it became quite impossible for him to retain any solid food, when he was restricted to a diet of milk, of which he took a pint daily in divided portions. Thus administered, the milk was retained, and the plan was so successful that the quantity was soon increased to a quart daily. About the 6th, however, he was no longer able to retain the milk in any quantity, while he seemed to reject it, not by an act of vomiting, but by a species of regurgitation. Thenceforward emaciation progressed, and he died on October 18, 1872.

The *post-mortem examination* was made six and a half hours after death. On opening the abdomen, no visible derangement was present until the omentum was removed, when a white, glistening prominence was noted, which proved to be the pyloric end of the stomach, thickened to the extent of three-fourths of an inch in section, and for two and a half inches towards the centre of the stomach. The cardiac end was similarly involved, and to a like degree, while the body of the stomach was normal. To the naked eye the appearances were rather those of a hypertrophy of the muscular substance of the organ in these situations.

Remarks.—The regurgitation of food here noticed is probably explicable by the condition of the cardiac orifice of the organ. The temporary benefit derived from the milk-treatment is quite in accordance with recent experience in similar cases.

4. *Pneumonic phthisis of right lung; miliary tuberculosis of the left lung as a sequel.*

Susan B., unmarried, but having given birth to one child, was admitted to the Philadelphia Hospital August 8, 1872. She was previously quite healthy. In July, while very warm and menstruating, she took a cold bath. This was followed by suppression of her menses, and a "cold," from which she never recovered. She however, continued at service until a few days before admission.

When Dr. Tyson assumed charge of the wards, on September 12, 1872, she had constant high fever, hurried respiration, a hot skin, and a temperature of 103° to 104°; also an annoying cough, with tenacious dark-gray puruloid expectoration.

Physical exploration showed resonance impaired on the right side anteriorly, and in the axilla; blowing respiration over the whole of this region, with moist râles and cooing sounds in the lower part of the chest. On the left side anteriorly, and in the axilla, there seemed no deficiency in resonance, though respiration appeared harsh in these situations. The pos-

terior part of the chest was not examined, because of the great inconvenience it gave the patient.

These symptoms continued unabated until she died.

The *post-mortem examination* revealed marked thickening of the pleural covering of the *right lung*, while the organ itself was riddled from apex to base with small cavities, varying in size from that of a pea to that of an English walnut, and chiefly oval in shape.

The *left lung* was the seat of diffuse miliary tuberculosis.

REVIEWS AND BOOK NOTICES.

THE MICROSCOPE AND MICROSCOPICAL TECHNOLOGY. A Text-Book for Physicians and Students. Translated from the German by GEORGE R. CUTTER, M.D., Clinical Assistant to the New York Eye and Ear Infirmary. Wm. Wood & Co., New York, 1872. 8vo, pp. 658.

Those who are familiar with Frey's admirable manual will feel gratified to Dr. Cutter for this very readable translation, which enables our American and English students who are unacquainted with the German tongue to participate in the instructions of the renowned Zurich professor. Any attempt to criticise a text-book whose merits are so pronounced that (as we learn from the translator's preface) it has already, in the few years since its first appearance, passed through four large editions abroad, would of course be useless; and we shall therefore confine ourselves to pointing out some of the numerous excellencies and few deficiencies in the scope and character of the work.

Professor Frey commences with a clear and concise account of the theory of the microscope, its varieties, accessory apparatus, and use, which extends over about one hundred pages; after which, full and elaborate directions for preparing, staining, injecting, and mounting microscopic objects occupy a nearly equal space. The remaining portion of the volume treats of the different normal and pathological tissues, secretions, etc. of the human body, with occasional illustrations from the domain of comparative histology, when required for complete elucidation of the subject. These directions for investigation possess an especial value to the American observer, on account of the explicit manner in which are described the manifold improved methods of demonstrating the various structures in their healthy or diseased conditions, which have rendered the German pathological laboratories so famous throughout the scientific world.

The imperfections of the volume are, in the first place, that its instructions, like those of most similar manuals, are often couched in technical language, and preceded by such scanty explanation of minute difficulties (which so fatally obstruct the path of a beginner) that only advanced students can reap their full benefit. Secondly, the number of diameters which each specimen is represented as being magnified is generally left undesignated, and this neglect occurs even in Fig. 171, copied from Prof. L. Beale, who has so justly and ably advocated the importance of always specifying the amplification under which each microscopic figure is drawn. Thirdly, whilst most of the references are to German instruments, etc., and, therefore, sometimes almost useless to Americans, their value is still further impaired by the fact that no uniform standard for prices, measurements, and so forth, is adopted; the cost of various articles being given as occasion serves, in thalers, francs, pounds, or dollars, and dimensions stated in millimetres, parts of a Paris line, or subdivisions of an English inch, without any attempt at reduction. Lastly, among the minor deficiencies we note the omission of Dr. Fenwick's invaluable method for detecting lung-tissue in sputa, of which both author and editor appear to be entirely ignorant, notwithstanding it adds so much to the certainty of our diagnosis in phthisis; the absence of any drawings explanatory of the dermatophytic affections; and the less than scant justice done to our leading microscope-dealers in Philadelphia. The work is declared upon the title-page to be profusely "illustrated with 343 engravings on wood," although this seeming wealth of embellishment is to a certain extent fictitiously augmented by the somewhat ingenious and altogether economical device of making wood-cuts 105, 117, 204, and 211 do duty a second time over slightly different letter-press, as Figs. 326, 241, 228, and 248 respectively.

To sum up all, we think that this handsome volume is one which the advanced student and working microscopist cannot afford to do without; but, at the same time, we fear that the novice who consults it as a guide in his elementary studies will often turn from its pages with disappointment and regret.

ON CEREBRIA AND OTHER DISEASES OF THE BRAIN. By CHARLES ELAM, M.D. Lond., etc. 8vo, pp. 142. Philadelphia, Lindsay & Blakiston, 1872.

Dr. Elam states that cerebritis uncomplicated with meningitis is a disease "unrecognized and undescribed," some authors even doubting its existence. In fact, all inflammatory affections of the brain have, in the opinion of our author, failed to receive from recent writers the attention they deserve: he has therefore written this little work with the object of giving his own experience in regard to them.

The chapter on tubercular meningitis is an example of the manner in which the book is written. It consists of a single case of the disease, in which recovery took place, and of another case which was not meningitis at all,—simply an instance of gastric disturbance with brain-symptoms.

In regard to cerebritis unaccompanied by meningitis, there is no doubt that Niemeyer was aware of its existence, although he does not describe it at length, and speaks of all forms of encephalitis as being rare; and Aitken, in his "Practice of Medicine," says, "While dissection demonstrates the fact that inflammation may exist either in the brain alone or in the membranes alone, yet, clinically, it is found that meningitis generally complicates cerebritis." Reynolds believes that inflammation of the brain is never met with without inflammation of its membranes.

Cerebria is defined by the author as "a spontaneous, acute, general inflammation of the substance of the brain, uncomplicated with meningitis," and he has given this name in contradistinction to cerebritis, which he says has so long been described as a compound of inflammation of the brain and its membranes.

The account of the disease appears to be based on but three cases; at least there is no reference to any others, and its most marked characteristics are said to be its uniform beginning and end. It begins with vomiting, and ends with death. In no instance was there any evidence of suppuration. In the first case, the only departure from health was the brain-substance being "closely dotted with red points, the gray matter darker than usual, and the white slightly rosy." In the second, the brain was so much softened that it could not support its own weight; but the microscope showed no pus. The post-mortem, in the third case, was similar to that in the first. In neither of these was any microscopic examination made.

The observations on the study of cerebral affections, and on the circulation of the brain, are of interest, and show considerable original thought; but our limited space will not allow us to discuss them.

JOURNAL OF THE GYNÆCOLOGICAL SOCIETY OF BOSTON. Monthly. Edited by WINSLOW LEWIS, M.D., HORATIO R. STORER, M.D., and GEORGE H. BIXBY, M.D. Vol. vi., January to July, 1872, pp. x., 480.

This journal is devoted to the consideration of the diseases peculiar to women. It includes reports of the meetings of the Gynæcological Society of Boston and the Obstetrical Society of Philadelphia; the latter extracted from the *American Journal of Obstetrics*. A large number of the articles have been contributed by members of the first-named society, but a welcome has been extended to every communication treating of subjects within the scope of the society. Some of these articles are of great practical value, among which we may mention a case of hysterical insanity depending upon cystic disease of the ovaries and extensive inflammation of the cellular tissue of the pelvis. The only symptoms during life were arrest of the menstrual secretion, and a phantom tumor; the latter was for a long time considered to be hydatids of the liver. The true state of the case was ascertained only by autopsy.

A history of Uretero-Uterine Fistula, by Drs. Wilhelm Alex. Freund and Ludwig Joseph, of Breslau, translated from the German by Mary Safford, (*homœopathic*) medical student at Breslau, contains more information on this form of fistula than can be found in any other work.

The society, in compliance with an invitation received from Dr. Henry A. Martin, paid a visit to the farm of the latter at Boston Highlands.

Fifty pages of the journal are given to a description of the methods, results, and comparative effects of animal virus, first remove, and long humanized, with respect to inflammatory consequences, eruptions, the danger of conveying blood-poisons, etc. Dr. Martin's virus can be obtained only from himself, as he supplies no agents or dealers with it.

BOOKS AND PAMPHLETS RECEIVED.

Outlines of Surgery and Surgical Pathology, including the Diagnosis and Treatment of Obscure and Urgent Cases, etc. By F. Le Gros Clark, F.R.S., etc. Second Edition. Crown 8vo, pp. 350. Philadelphia, Lindsay & Blakiston, 1872.

What Physiological Value has Phosphorus as an Organismal Element? An Essay to which was awarded the Prize of the American Medical Association for 1872. By Samuel R. Percy, M.D., etc. 8vo, pp. 56. Collins, Printer.

Nebulæ, Comets, Meteoric Showers, and the Revelations of the Spectroscope regarding them. By Prof. H. Schellen and others. Coral and Coral Islands. By Prof. J. D. Dana, of Yale College. (Half-Hour Recreations in Popular Science, No. 5.) Small 8vo, pp. 47. Boston, Estes & Lauriat, 1872.

Annual Report of the Surgeon-General of the United States Army, 1872.

GLEANINGS FROM OUR EXCHANGES.

TRAUMATIC ICTERUS.—M. Verneuil (*Le Mouvement Médical*, Sept. 14, 1872) recently announced to the Académie de Médecine the following propositions:

1. Icterus may be developed as a consequence of a traumatic lesion, an accidental wound, or a surgical operation, whether affecting the liver or some organ more or less remote.

2. In the first case there is traumatic icterus properly so called, or direct; in the second case it is indirect.

3. This latter form comprises two varieties, clearly distinct in causes, course, prognosis, and pathogenesis.

4. The first variety, *pyæmic* icterus, is a symptom of purulent infection; it is due to septicæmic alteration of the blood, with or without the occurrence of metastasis. The second variety, *reflex* icterus, not pyæmic, is doubtless owing to perverted innervation.

5. Neither direct traumatic icterus nor the pyæmic variety implies any previous change in the liver. Organic lesion of this gland seems, on the contrary, to be a predisposing condition necessary to the production of the reflex variety.

6. The diagnosis between these three forms is generally easy. For the first, it suffices to recognize the lesion, direct or indirect, of the liver; for the second, we have the whole train of pyæmic phenomena; for the third, we must investigate, above all, the circulatory organs and the thermometric changes.

7. Although generally grave, the prognosis of icterus occurring consecutively to lesions varies much, according to their nature and complications; the severity of the direct traumatic form depends upon the effect of the primary cause upon the gland. Pyæmic icterus is, and always must be, a very serious affair, like the general disorder of which it is merely a symptom. Reflex icterus is comparatively innocent, except where the previous disorder is of a nature necessarily fatal.

8. Reflex icterus does not seem to modify unfavorably the process of repair of the injury causing it.

9. This condition belongs to the great class of "deutéropathies traumatiques éloignées" (remote traumatic secondary lesions). It constitutes one of their rarest forms. Judging from the meagreness of the reports concerning it, its history can only be completely made out from the results of fresh investigation.

DETERMINATION OF THE AMOUNT OF SUGAR IN DIABETIC URINE BY THE DIFFERENCE IN THE SPECIFIC GRAVITY BEFORE AND AFTER FERMENTATION (W. Manassëin, *Deutsch. Archiv für Klin. Med.*, Bd. x., S. 73–88; quoted from the *Central-Blatt für Med. Wiss.*, No. 35, 1872).—The experiments of Manassëin corroborate the statements of Roberts (Memoirs of the Manchester Lit. and Phil. Soc., 1861), that the amount of sugar in diabetic urine may be determined in the manner indicated by the title of this article. Roberts found that for every difference of 0.001 in the specific gravity before and after the process of fermentation, we must use a multiplier, 0.23, in order to obtain the percentage of sugar in the urine. Manassëin suggests 0.219 as a multiplier, instead of which, however, he prefers the use of a divisor, 4.56, for the calculation of the amount of sugar. With this he divides the difference in the specific gravity multiplied by 1000, and obtains the percentage of sugar directly. For example, let the

Specific gravity before fermentation be . .	1.0298
" " after " " . .	1.0055
The difference	0.0243

Multiply this by 1000, and

Divide by . . . $4.56 = \frac{24.3}{4.56} = 5.33$,

the percentage of sugar.

The temperature which most speedily accomplishes the fermentation (usually in twenty-four hours) is 20° to 24° C.

The cheapness of this process is one of its advantages, but the length of time, eighteen to twenty-four hours, required for its completion is objectionable in many cases. The method is applicable to diabetic

urine largely diluted with water; hence it may be put down among the delicate tests for sugar in urine.

TREATMENT OF FISSURE OF THE ANUS (*Med. Times and Gazette*, June 8, 1872).—A lecture on this subject, by Dr. Dolbeau, is reported by Dr. Osborne Powell. He observes that each evacuation of the bowels is accompanied by a feeling of something cracking, followed by intense pain; nevertheless, in many instances no fissure can be found, even after the most careful and minute inspection. He consequently regards it as of the nature of neuralgia. It commonly occurs between the ages of eighteen and thirty, and most frequently in women. In the treatment the first thing to do is to abolish the muscular element. Récamier, whose name is inseparable from the history of this malady, well comprehended that the fissural lesion is an element without importance, and he cured several patients by what he termed *cadenced massage*. Chloroform was then unknown. He had the patient held by some strong assistants, and he introduced first one finger, then another, and so on, until he had passed his whole hand into the rectum; he then closed his fist, and drew his hand from the intestine. This was a most rational operation, and the employment of chloroform in the present day permits us to practise it in a much less barbarous manner. Thus, the patient being put under the influence of chloroform, the surgeon introduces his two thumbs into the rectum, and endeavors to bring them in contact with the two ischia; at that moment one hears a strong cracking noise, and the operation is finished. The first stool after the operation is painful, but this pain is simply the result of the region being contused, and does not in the least resemble the pain which characterized the spasmodic attacks. The succeeding stools are without any pain, and the cure is assured.

FISCHL ON PNEUMONIA MIGRANS (*Prager Vierteljahrsschr.*, Bd. 114, S. 112–123).—Schiffer calls attention to this article, in a review in the *Central-Blatt für Mediz. Wiss.*, No. 35, 1872. It appears that up to the present time only Waldenburg and Wiegand have contributed accounts of this rare affection; the former relating one case, and the latter two cases. The chief characteristic of the disease consists in many parts of the lung being successively attacked by the croupous process, the portions first attacked healing as the disease advances to the healthy parts.

The course of this disease may be anatomically continuous, as in the case of Waldenburg, where the disease began as a pneumonia dextra inferior, passed upwards through the entire right lung, attacked the apex of the left lung, and by steady advances reached the base of the lung on the left side. This course was passed over *twice* by the disease in the same individual. On the other hand, there may be no such regularity in the course pursued by the disease, and the same lung may be attacked first in one part and then in another. In any event the disorder is very tedious, and, as Waldenburg has observed, highly suggestive of erysipelas migrans. The case related by Fischl, of a strong woman, 36 years old, showed the last-mentioned characteristics. When this patient was first seen, fourteen days after the beginning of the disease, the infiltration was discovered in the left lung, upper part; two days later the infiltration was found at the base of the right lung; a few days subsequent to this the disease was found in the infraclavicular region, left side, etc. Twice, parts were attacked which had been already affected. The infiltrations were quickly developed, without initial chills, and were very quickly absorbed. The disease lasted six weeks, with continuous fever, and the sputa continued of a catarrhal nature during the entire course of the affection, with at no time the appearance of any blood in them.

TREATMENT OF PEMPHIGUS.—Mr. Hillairet (*Le Mouvement Medical*, Sept. 14, 1872), reasoning from the analogy between this disease and burns of the second degree, believes that a similar treatment—dressing with cotton-batting (*ouate*) and lime-water liniment—will be found to answer well in both.

MISCELLANY.

ANOTHER QUADRUPLE AMPUTATION.—In our issue for Nov. 16 (Miscellany, p. 110) we quoted from a foreign exchange an account of a quadruple amputation by Dr. Begg, of Dundee, which was said to be the only one on record in which all four extremities had been removed. Dr. Woodhull, U.S.A., has been kind enough to call our attention to a case detailed in Circular No. 3, U.S.A. War Department, S. G. O. (Case DCXII., p. 216), in which "a similar set of operations was performed by Acting Assistant-Surgeon Alfred Muller, at Fort Ridgely, Minnesota, Jan. 13, 1866. This antedates the Scotch operation, and the patient appears to have been in a more deplorable condition—if this were possible—than the other, in view of the condition of the nose and patellæ." The operation in Dr. Muller's case was done for frost-bite, on the nineteenth day; the tip of the nose had perished, and the patellæ subsequently exfoliated. "The probable inability to use artificial limbs is a misfortune that gives to the American a very different termination from that of the British case. This same case—the American—was also briefly published in 1867, on pp. 522–3 of the Catalogue of the Surgical Section of the Army Medical Museum."

JEWISH MORTALITY.—According to Dr. Stallard's work on "London Pauperism," the mortality of Jewish children under five years of age is much less than among other children. There is no hereditary syphilis, and scarcely any scrofula. The mother engages in no employment that takes her away from her children. From one year to five the Jews lose only ten per cent., while the Christians lose fourteen. The average life of the Christian is thirty-seven years,—of the Jew, forty-nine years. Beyond sixty years, only a quarter of a Christian population will be alive, but a quarter of a Jewish population will exceed seventy-one years. In Prussia the Christian population requires fifty-one years to double itself, but the Jewish population will double itself in forty-one years.

PRIZES.—The Royal Institution of Science, Literature, and Arts, in Venice, offers a medal of the value of three thousand francs (£120), to be awarded in 1874 to the author of the best essay on the following subject: "The advantages derived by the medical sciences, especially physiology and pathology, from modern discoveries in physics and chemistry; with a retrospective view of the systems which prevailed in medicine in past times." The competition is open to foreigners; and the essays may be written in French.

A GOOD EXAMPLE.—It will be remembered that a few weeks since the Reverend Canon Charles Kings-

ley, in his presidential address to the Birmingham Midland Institute, recommended with great earnestness and eloquence the teaching of the art, and also the encouragement of the practice, of preserving health. We have just learned from the Birmingham papers that this good advice has been followed by an anonymous benefactor investing £2500 to establish a professorship on that subject.

THE Medical Society of London offers the prize of the Fothergillian gold medal for 1873, of the value of twenty guineas, for the best essay on cancer. The subject for 1874 is the therapeutic means for the relief of pain. The prize is open for universal competition. Essays, *not in the handwriting of the author*, must be forwarded to the Society's rooms on or before the 1st of November next preceding the 8th of March in the years 1873 and 1874 respectively.

AT a meeting of the Medical Society of Victoria held in June last, the following collection, taken from the stomach of a lunatic upon whom a post-mortem examination had been made, was exhibited:—Twenty-five pebbles, sixteen pieces of glass, twelve nails, one screw, two bones, a button, five bits of tin, a peach-stone, six fragments of a pipe-stem, and a whole cutty pipe. The cutty pipe was found fixed in the ileo-cæcal valve.

MEDICAL MICROSCOPICAL SOCIETY.—A new society has been proposed, and is probably by this time in operation, in London, with the above name. A writer in the *Medical Times and Gazette* says, and we should think justly, that it would have been better had the medical members of the already existing Microscopical Society constituted themselves into a medical section.

ANOTHER NEW JOURNAL.—The prospectus of a new monthly, to be called the *Central New York Medical Journal*, has been issued by Dr. Ely Van De Warker, of Syracuse, N. Y. It is to be published subject to the approval of the Medical Association of Central New York, upon a guarantee of a subscription-list of three hundred.

A CAUTION.—A surgeon of Leominster, England, Mr. David Davies, has been fined £1 and costs for having twice kissed a lady who came to consult him as to the beating of her heart, which, he declared, beat "naturally enough."

ACCORDING to the census of the German empire, which was taken in December last, the total population (including Alsace and Lorraine) amounts to 41,058,000. The females exceed the males in the empire by no less than 768,000.

THE number of paupers relieved in England and Wales at the end of July last was 10.6 per cent. less than at the corresponding period of the year 1871.

THE Augusta Medical College of Georgia has been made the Medical Department of the University of Georgia; a compliment well bestowed and fully merited.

DR. W. R. GIBBES, of Columbia, has been elected Professor of Anatomy and Surgery in the University of South Carolina, in place of Dr. Darby, resigned.

DR. GEORGE COCHRAN, health officer of Brooklyn, died of congestion of the lungs, at his residence in that city, on the 19th ult.

DR. WARREN STONE, a distinguished surgeon of New Orleans, died in that city on the 6th inst., at the age of sixty-five.

DR. SAMUEL WILLEY, one of the oldest practitioners in St. Paul, Minnesota, died recently.

MORTALITY OF PHILADELPHIA.—The interments reported at the Health Office for the week ending Dec. 7, 1872, were 302; 165 adults, and 137 minors. 23 were of bodies brought from the country; making the mortality of the city 279. Among the causes of death were:

Consumption of the Lungs	39
Other Diseases of the Respiratory Organs	41
Diseases of the Circulatory Apparatus	20
Diseases of the Brain and Nervous System	52
Diseases of the Digestive Apparatus	16
Zymotic Diseases (Scarlet Fever 5, Hooping-Cough 6)	17
Typhoid Fever	6
Casualties	8
Cancer	9
Debility (including "Inanition" and "Marasmus")	31
Still-born	26
Old Age	14

(The interments reported for the week ending Dec. 9, 1871, were 470.)

THE meteorological record kept at the Pennsylvania Hospital was as follows:

	THERMOMETER.		BAROMETER.
	Max.	Min.	(2 P.M.)
Dec. 1	34.5°	18.0°	30.24 in.
" 2	48.5	36.5	29.99 in.
" 3	45.0	35.0	30.20 in.
" 4	40.0	35.0	30.39 in.
" 5	38.0	33.5	30.36 in.
" 6	45.0	28.5	30.39 in.
" 7	39.0	32.5	30.37 in.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U. S. ARMY, FROM NOVEMBER 26, 1872, TO DECEMBER 2, 1872, INCLUSIVE.

ALEXANDER, R. H., SURGEON.—Assigned to duty as Post-Surgeon at Fort Vancouver, Washington Territory; relieving Surgeon J. H. Bill, U.S A. S. O. 154, Department of the Columbia, Nov. 14, 1872.

JAQUETT, G. P., ASSISTANT-SURGEON.—Granted leave of absence for twelve days. S. O. 208, Department of the Platte, Nov. 22, 1872.

HUNTINGTON, D. L., ASSISTANT-SURGEON.—Assigned to duty at Camp Harney, Oregon, but, owing to lateness of season, to proceed to Fort Stevens, Oregon, for temporary duty at that post. S. O. 155, Department of the Columbia, Nov. 15, 1872.

PHILLIPS, H. J., ASSISTANT-SURGEON.—Granted leave of absence for thirty days, and leave to go beyond the limits of this Department. S. O. 153, Department of the Columbia, Nov. 13, 1872.

STYER, CHARLES, ASSISTANT-SURGEON.—Granted leave of absence for four months from December 1, 1872. S. O. 309, War Department, A. G. O., Nov. 29, 1872.

WEISEL, D., ASSISTANT-SURGEON.—Granted leave of absence for thirty days. S. O. 306, War Department, A. G. O., Nov. 26, 1872.

MATTHEWS, WASHINGTON, ASSISTANT-SURGEON.—Assigned to temporary duty at David's Island, N Y. Harbor. S. O. 228, Department of the East, Nov. 25, 1872.